

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 14, 2004 (Paper No. 5). Upon entry of this response, claims 2, 4-7, 10, 13, 15-19, 23-25, 27, and 32-34 are pending in the application. In this response, claims 2, 4-7, 10, 15, 17, 23-25 and 32 have been amended, claim 34 has been added, and claims 1, 14, 20-22, 26, and 28-31 have been cancelled. Applicants respectfully request that the amendments being filed herewith be entered and request that there be reconsideration of all pending claims.

1. Allowable Claims

Applicants acknowledge the Examiner's indication in the Office Action that claim 18 is allowable, and that dependent claims 2, 15-17, 20, 23, 24, 31, and 32 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Applicants have rewritten claims 2, 15, 17, 23, and 24 to incorporate the limitations of their parent claims, and therefore respectfully submit that claims 2, 15, 17, 23, and 24 are in condition for allowance. Claim 16 depends from now independent claim 15, and is therefore allowable.

Claims 20, 31 and 32 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicants take this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicants so choose, and do not intend to dedicate any of the cancelled subject matter to the public.

2. Rejection of Claims 1, 4, 5, 7, 19, 21, 25, 28, 29, and 30 under 35 U.S.C. §102

Claims 1, 4, 5, 7, 19, 21, 25, 28, 29, and 30 have been rejected under §102(b) as allegedly anticipated by *Bergmans* (U.S. 5,426,671).

a. Claims 1, 21, and 28-30

Claims 1, 21, and 28-30 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicants take this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicants so choose, and do not intend to dedicate any of the cancelled subject matter to the public.

b. Claims 4, 5, and 7

Claims 4, 5, and 7 have been amended to depend from allowable claim 2. Since claim 2 is allowable, Applicants respectfully submit that claims 4, 5, and 7 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 4, 5, and 7 be withdrawn.

c. Claim 19

Applicants respectfully traverse this rejection. Applicants respectfully submit that *Bergmans* fails to teach, disclose or suggest at least a “means for computing a centroid error based upon coefficients of the equalizing means” as recited in amended claim 19. For at least this reason, Applicants respectfully submit that *Bergmans* does not anticipate claim 19 as amended. Therefore, Applicants request that the Examiner’s rejection of claim 19 be withdrawn.

d. Claim 25

Applicants respectfully submit that *Bergmans* fails to teach, disclose or suggest at least a “dual eye close structure, the first eye close being coupled to the equalized signal and the second eye close being coupled to an output of a decision feedback equalizer, wherein the dual eye close structure is configured to remove the signal path between the averager and the control circuit” as recited in amended claim 25. For at least this reason, Applicants respectfully submit that *Bergmans* does not anticipate claim 25 as amended. Therefore, Applicants request that the Examiner’s rejection of claim 25 be withdrawn.

3. Rejection of Claims 6, 10, 13, 14, 22, and 27 under 35 U.S.C. §103

Claims 6, 10, 13, 14, 22, and 27 have been rejected under §103(a) as allegedly obvious over *Bergmans* (U.S. 5,426,671) in view of the knowledge of a person of ordinary skill in the art. Applicants respectfully submit that these rejections have been overcome by the claim amendments made herein, or have been rendered moot by claim cancellation.

a. Claims 6, 10, 13, and 27

Claims 6 and 10 have been amended to depend from allowable claim 2. Claim 13 is dependent on claim 10. Claim 27 is dependent on claim 25, which is allowable for at least the reasons described above. Since claims 2 and 25 are allowable, Applicants respectfully submit that claims 6, 10, 13, and 27 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claims 6, 10, 13, and 27 be withdrawn.

b. Claims 14 and 22

Claims 14 and 22 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicants take this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicants so choose, and do not intend to dedicate any of the cancelled subject matter to the public.

4. Rejection of Claims 26 and 33 under 35 U.S.C. §103

Claims 26 and 33 have been rejected under §103(a) as allegedly obvious over *Bergmans* (U.S. 5,426,671) in view of *Kim* (U.S. 5,654,765).

a. Claim 26

Claim 26 is cancelled without prejudice, waiver, or disclaimer, and the rejection of this claim is therefore rendered moot. Applicants take this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of this cancelled claim in a continuing application, if Applicants so choose, and do not intend to dedicate any of the cancelled subject matter to the public.

b. Claim 33

Since claim 25 is allowable for at least the reasons described above, Applicants respectfully submit that claim 33 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claim 33 be withdrawn.

5. Newly Added Claims

Applicants submit that no new matter has been added in the new claim 34, which incorporates subject matter from claims 19 and 20. Applicants submit new claim 34 is allowable over the cited prior art, for at least the reason that the cited prior art does not teach, disclose, or suggest the feature of “a centroid error calculator configured to produce a centroid error based on the plurality of coefficients received from the equalizer.” Therefore, Applicants request that the Examiner enter and allow the above new claim.

CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 2, 4-7, 10, 13, 15-19, 23-25, 27, and 33-34 be allowed to issue. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

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